# Access Requirements for Alamitos Bay Shoreline Sorrento Trail

**Provided To:** 

City of Long Beach

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**Prepared By** 

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# **Access Requirements for Alamitos Bay Shoreline Sorrento Trail**

# City Manager's Office

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#### Overview

The panel is comprised of three Architect Certified Access Specialists (CASps) – Janis Kent, FAIA, Architect, CASp; Glenn Dea, AIA, Architect, CASp; and Paul Joelson, AIA, Architect, CASp. We have walked the site on March 9th, 2016, reviewed the information provided by the City, and performed research on regulatory items that might have affect on the Sorrento Alamitos Bay Shoreline Trail (Project).

The question before us is "...whether ADA access along all or part of the existing or new improved walkway is appropriate or may be required by law." Further, we have been asked to clarify what regulations apply for scoping and technical implementation if the project is indeed required to be accessible.

#### **Project Elements**

The Sorrento Alamitos Bay Shoreline Trail Project (Project) under consideration is comprised of all of the following elements defined in Special Condition 14 of the Coastal Development Permit 5-11-085 from the California Coastal Commission.

#### **Shoreline Trail - Improved portion**

This area corresponds with the area described in Special Condition 14B: "...The western end of the improved public walkway will begin in the public right-of-way at 5425 East Sorrento Drive and be extended in a continuous manner to...5609 East Sorrento Drive..."

#### **Shoreline Trail - Unimproved portion**

This area corresponds with the area described in Special Condition 14B, which states: "From 5609 East Sorrento Drive the public accessway may continue east on the sandy beach/mudflat (in an unimproved state)..."

#### Vertical Accessway - Existing public way or trailhead

Six public accessways connect the Sorrento Drive sidewalk along the public right of way to the Shoreline Trail and the water's edge. They are described in Special Condition 14E: "All existing vertical public accessways shall be maintained at their existing location. Consideration should be given to what improvements if any should be made..."

#### **Stairs - Existing to be improved**

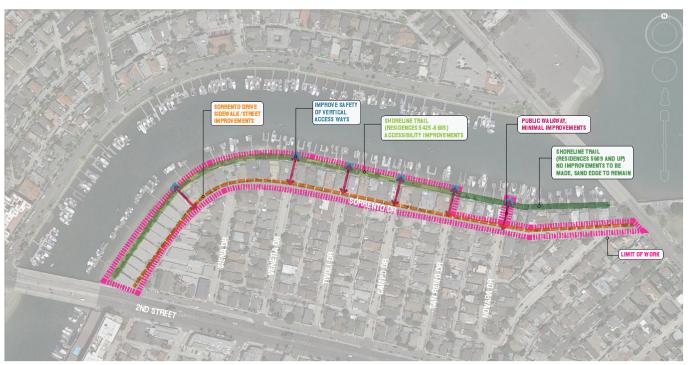
Several existing stairways exist leading from the Shoreline Trail or the Vertical Accessways to the edge of the water. The conceptual design calls for these stairs to be improved and rebuilt.

#### East Sorrento Drive - Public sidewalk along the public right of way

Improvements to the north sidewalk that runs along the roadway of Sorrento Drive, described in Special Condition 14B) as "...The vertical access ways adjacent to 5633 and 5617 East Sorrento Drive should be connected to East Apian Way via an improved public sidewalk on the northern side of East Sorrento Drive."

These defined project elements will be referenced thru-out this document on Access requirements and will be based upon the Conceptual Design developed by Mia Lehrer + Associates as delineated below.

# SITE CONTEXT & PROJECT SCOPE



Sorrento Alamitos Bay Shoreline Trail | Concept Package ML A 7

#### **Section I: Executive Summary**

After reviewing the requirements and the proposed design for the Sorrento Alamitos Bay Shoreline Trail Project (Project), we are all of the opinion that the Project would be considered new construction for any improvements. The proposed stairs for the most part would also be considered new construction since they are not just being repaired but rather expanded, improved and slightly relocated. In general there is not one regulation or code that directly applies in total to this specific Project. However, we are all in agreement that the **Project is indeed required to be made accessible** due to case law, even in the absence of specific scoping or technical requirements that directly apply (see below). There may be other methods than what we have stated for equivalent facilitation, but solutions and direction as stated in this document, would be what we recommend to achieve access and equivalency. Based on this premise, below are our professional findings and recommendations.

Due to the absence of specific scoping and technical requirements this raises the question as to what requirements are to be followed. Below is a listing of different regulations that we have reviewed and discussed as to whether a specific standard or guideline strictly applies to the Project or not and whether they can be used for equivalency if they do not directly apply.

- The <u>Americans with Disabilities Act Standards (ADAS)</u> were developed primarily for buildings and facilities on sites. The Project does not fall within this category as defined in the ADAS.
- Although the proposed <u>Public Right of Way Accessibility Guidelines (PROWAG)</u> is not yet accepted as law, it does set precedence. It is clear that the US Access Board is defining the <u>public-right-of-way</u> as public lands used for transportation purposes. It appears that the term <u>public-right-of-way</u> as being used in connection with Shoreline Trail is not being used in the same manner as defined in the proposed federal guidelines.
- The <u>California Building Code (CBC)</u> differentiates sidewalks and walks sidewalks are contiguous to a street whereas a walk is not. The CA Government Code Sections 4450 and 4451 basically state that the CBC applies to buildings, structures, sidewalks, curbs, and related facilities.
- The <u>2015 Architectural Barriers Act Standards (ABAS)</u> has a new 2015 definition for trail with requirements for Access. Although the ABAS is for federal application only and does not apply to a Title II public entity, what is interesting about the definition of a trail under the ABAS is that there is no similar type of definition under other regulations.
- The <u>2015 California State Parks Accessibility Guidelines (CSPAG)</u> has incorporated many of the federal ABA requirements including trails in its update.

In case law, <u>Fortyune v City of Lomita</u>, ruled on by the US Court of Appeals for the Ninth Circuit September 5, 2014 (No. 12-56280), it has been established that the lack of specific regulations cannot eliminate a statutory obligation, and that each newly constructed or altered facility is to be readily accessible. We have explored a number of federal and state regulations that might set some precedence for Shoreline Trail. Per the 2010 Americans with Disabilities Act Standards (ADAS) and the 2015 Architectural Barriers Act (ABAS) all newly constructed or altered areas are to be accessible.

#### The Trail & Beach Access

The trail itself should be made accessible to the extent that is technically feasible as discussed herein. With respect to direct beach access, we discuss recommendations to provide viewing areas in lieu of pedestrian paths (or wheelchair lifts) at specific site locations. These measures, in our opinion, would be considered equivalent means of access to the water edge in the absence of specific technical guidelines in the 2010 ADAS. The trail requirements and guidelines as designated under the 2015 Architectural Barriers Act (ABAS) and under the 2015 CA State Parks Accessibility Guidelines (CSPAG) would be appropriate guidelines to follow, allowing in specific instances, steeper slopes on the trail itself and the absence of handrails. Both also have information on trail widths, surface textures, passing spaces, and resting areas. There is also information on beach access which would be appropriate to incorporate. Although this is not a swimming beach, it is a water edge and the regulations would be applicable.

#### The Public Right of Way

It is our understanding that per the Coastal Development Permit Item #14B, a new improved public sidewalk is to be provided, and is part of the scope, from Campo Drive east to Appian Way. Since there is a disconnect for an accessible way from the south-western-most section to the access point at the end of Venetia Drive, it is our opinion that the public sidewalk also needs to be improved in this area as well. Public access from one end of the trail to the other is afforded to some persons without any new improvements, so persons who use a wheelchair, or other mobility device should be afforded access as well. Therefor, sidewalk improvements in this area will provide for equivalent access with the consideration of the CA Coastal Commission requirement of not allowing for any fill or boardwalks. It is our understanding that this is indeed incorporated into the scope of work already planned.

#### **Technical Infeasibility**

There is an exception in the federal regulations for technical infeasibility due to site constraints which we believe is appropriate as discussed below. None-the-less, equivalent access is still to be provided. The federal definition of Trail, also accepted by the CA State Parks (CSP), provides for more leeway for fitting into a naturalistic terrain and may be more appropriate for this application.

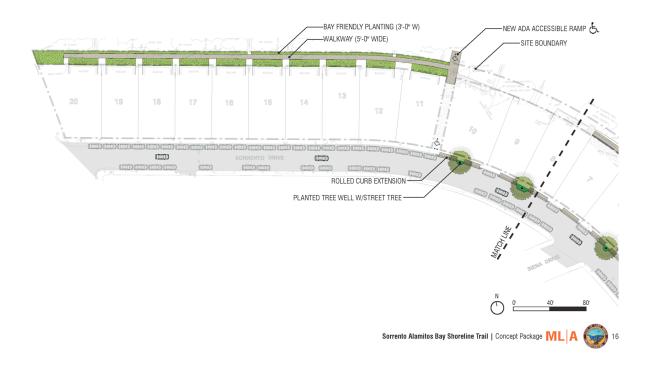
Based on our analysis of the above and following Detailed Discussion with regarding referenced regulations, guidelines, codes, and resources, we have evaluated the proposed design and make the following recommendations for Access as delineated in this document. Although the 2015 ABAS substantiated by the 2015 CSPAG does not directly apply, they both provide the best direction, in our opinion, for scoping and technical direction for this project.

#### Recommendations

#### **South-Western-Most Section**

In this area, from the street entry, we agree that a method is necessary to get to the water area. What we recommend is to turn the ramp so that the sloped walkway is parallel to Shoreline Trail rather than at right angles. This prevents someone using the sloped portion from going directly into the water which could be hazardous. There is over 48' from the entry to the next gangway which most likely provides sufficient space for this solution. Although not required by the ABAS or CSPAG, we recommend that this sloped walkway comply with handrails and curbs for pedestrian ramps, although the slope itself could be modified to conform with the ABAS and CSPAG trail slopes. Turning/passing spaces on the sloped area should be provided at various points to accommodate rise in the waterway.

The western-most area which is currently being used as a small boat launch. If no work is being done to the area and there is another small boat launch that is accessible in the vicinity then this would not need to be made accessible per *program accommodation*, if it is indeed equivalent. We recommend that if there is no other small boat launch, then this area should become an accessible boat launch. If this is not the intent for this area, then signs should be posted prohibiting the area from being used as a boat launch.



#### **West of Venetia Drive**

The proposed 'improved' stairs at the end of Venetia Drive has a substantial height differential. In our opinion, this makes access in this area down to the water's edge technically infeasible per the ADAS definition of site constraints and due to the location of adjacent gangways. It is our understanding that the three lots located adjacent to the walk west of Siena Drive do not require being developed per the Coastal Development Permit Item #14C since the stipulation is to avoid new fill and boardwalk. What we recommend as equivalent facilitation to the Venetia Drive stairs is to ramp the walkway down starting at the edge of the gangway in front of Lot 7. The space between the gangways at lot 7 and lot 9 is roughly 95 linear feet per the Tract Map. This would provide enough space to gradually slope down an accessible trail to the sand and water's edge. Consideration should be given to the recommended elements of turning spaces, handrail, and curb as previously delineated under the South-Western-Most section.

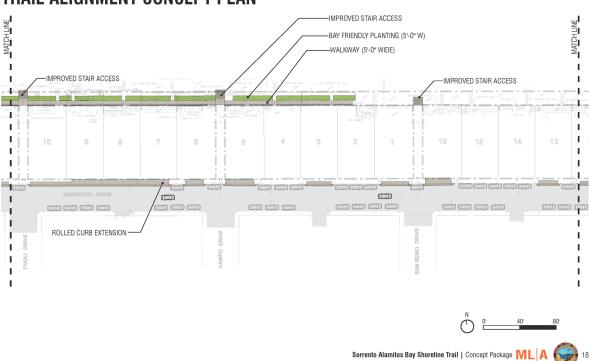
If it is determined that there will be no improvement west of Venetia Drive due to soil conditions thereby extending the unimproved area, we recommend providing a viewing area adjacent to the stairs at the end of Venetia Drive.



#### From Tivoli Drive to San Remo Drive

The proposed 'improved' stairs at the end of the vertical accessways located at the end of the three drives also have a substantial height differential. In our opinion, due to this and adjacent gangways, access to the water/sand in this area would be technically infeasible per the ADAS definition of site constraints. A necessary measure, in order to provide an equivalent experience, other than installing wheelchair lifts, which may have its own set of challenges, is to provide viewing areas at the head of the stairs. Even though the existing stair run in front of lot 2 is not being improved, we recommend also placing a viewing area to afford those who can not negotiate steps some measure of comparable experience.

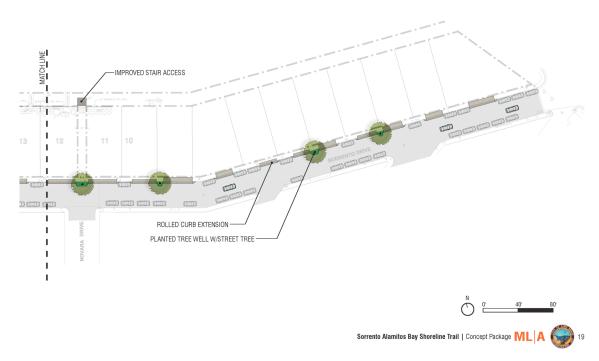
At the Tivoli Drive stairs it would be preferable to have a viewing area on each side, whereas at the Campo Drive stairs one viewing area is preferable to the west due to adjacency of gangways. In front of Lot 2, there appears to be enough space to slightly ramp down to a viewing area to the west of the stairs bringing people closer to the water and would be recommended, even if it is only 6". We also recommend that the proposed 'improved' stairs at the end of San Remo Drive have the stairs running at right angles towards the west from the vertical accessway, rather than in the same direction, with a viewing area straight ahead or towards the east.



#### **Novara Drive**

The proposed 'improved' stairs at the end of Novara Drive also has a substantial height differential and in our opinion would make access to the water/sand technically infeasible. Regardless, some measure of equivalent experience would need to be provided.

We recommend that the proposed 'improved' stairs at the end of San Remo Drive also has a viewing area at the top of the stairs looking east.



#### **Summary of Requirements per ABAS Technical Regulations**

If the design for the Sorrento Alamitos Bay Shoreline Trail Project follows the requirements for Trails and Beach Access under the federal ABA Standards, as we are recommending, then the regulation requirements within the Standards should be followed. Below is an <u>overview summary only</u> of the technical requirements. The 2015 CA State Parks Accessibility Guidelines is the same as the 2015 ABA Standards for this area with the exception that it states a level area as being 2% not 2.083%.

#### **Trails**

- The trail surface is to be firm and stable
- The width is to be 36" minimum
- If the trail is less than 60" minimum in width, provide a 60" x 60" passing space at the end of the trail and with no more than 1,000 linear feet between passing spaces
- Obstacles along the trail should have no more than ½" vertical differential where the obstacles are other than paving or boards the surface differential can be 2" maximum as long as there is 48" minimum between
- The trail has a minimum of 70% of its length at 8.33% maximum slope; a 30' length can go up to a 10% slope, and a 10' length can be 10% to 12% slope maximum
- The cross slope is to be 2.083% maximum if paved or has boards otherwise it is permitted to be up to 5% maximum only when necessary for drainage
- Resting intervals of 60" minimum in length by the trail width have a 2.083% maximum slope in any direction and are to be provided when the trail slope is steeper than 5% if the slope is 5% to 8.33% provide a resting interval every 200 linear feet maximum; if more than 8.33% to 10% slope then every 30 linear feet; and if more than 10% to 12% then every 10 linear feet
- Signage at the head of the trail is to be provided which includes the length of the trail segment, its surface type, typical and minimum width, typical and maximum slope, and typical and maximum cross slope

#### **Beach Access**

- The beach access is to be firm and stable
- Provide a 60" minimum width route connecting to the high tide or high water level
- When the slope is greater than 5% up to 8.33% the segment length is 50 linear maximum; and when greater than 8.33% up to 10% maximum then the segment length is 30 linear feet
- Resting intervals with a 2.083% maximum slope in all directions are to be provided of 60" x 60" when the slope is steeper than 5% at the end of each segment

#### **Viewing Areas**

- The viewing area is to be firm and stable with a 2.083% maximum slope in all directions
- The area is to have a turning space either a 60" diameter or a 60" 'T'-shaped space
- A 36" x 48" clear ground space shall have one side adjoining or overlapping the trail

#### **Section II: Detailed Discussion**

#### Overview

The panel is comprised of three Architect CASps – Janis Kent, FAIA, Architect, CASp; Glenn Dea, AIA, Architect, CASp; and Paul Joelson, AIA, Architect, CASp. We have walked the site on March 9th, 2016, reviewed the information provided by the City, and performed research on regulatory items that might have an affect on Shoreline Trail. The question before us is "...whether ADA access along all or part of the existing or new improved walkway is appropriate or may be required by law." Further, we have been asked to clarify what regulations apply for scoping and technical implementation if Shoreline Trail is required to be accessible.

It is our professional opinion that Shoreline Trail would be considered new construction for any improvement per the implementing regulations for public entities CFR 35.151(a)(1) and (b)(1). The proposed stairs for the most part would also be considered new construction since they are not just being repaired but rather expanded and improved and slightly relocated. In general there is not one regulation or code that directly applies to this situation. However, we are all in agreement that Shoreline Trail must be made accessible due to the following case law.

Per the case <u>Fortyune v City of Lomita</u>, ruled on by the US Court of Appeals for the Ninth Circuit September 5, 2014 (No. 12-56280) and denied review by the US Supreme Court on June 29, 2015 (docket file 14-920), a precedent was previously established that <u>the lack of specific regulations</u> cannot eliminate a statutory obligation and that each newly constructed or altered facility is to be readily accessible.;

#### **Summary**

#### Americans with Disabilities Act

Affirming the district court's denial of a motion to dismiss, the panel held that Title II of the Americans with Disabilities Act requires local governments to provide accessible on-street parking in the absence of regulatory design specifications for on-street parking facilities. The panel stated that the text of the ADA, the relevant implementing regulations, and the Department of Justice's interpretation of its own regulations all led it to conclude that public entities must ensure that all normal governmental functions are reasonably accessible to disabled persons, irrespective of whether the DOJ has adopted technical specifications for the particular types of facilities involved....

We have explored a number of federal and state regulations that might set some precedence for Shoreline Trail. Per the 2010 Americans with Disabilities Act Standards (ADAS) and the 2015 Architectural Barriers Act (ABAS) all newly constructed or altered areas are to be accessible. There is an exception for technical infeasibility due to site constraints which we believe is appropriate as discussed below. None-the-less, equivalent access is still to be provided even if considered technically infeasible. Our consideration for access of Shoreline Trail covers two critical aspects; 1) the proposed improvement for the trail itself, and 2) entering the proposed improved trail from the public right of way.

The trail itself can be made accessible to the extent that is technically feasible as discussed herein. With respect to direct beach access, we discuss recommendations to provide viewing areas in lieu of pedestrian paths (or wheelchair lifts) at specific site locations. These measures, in our opinion, would be considered equivalent means of access to the water edge in the absence of specific technical guidelines in the 2010 ADAS.

The trail requirements and guidelines as designated under the 2015 Architectural Barriers Act (ABAS) and under the 2015 CA State Parks Accessibility Guidelines (CSPAG) would be appropriate guidelines to follow, allowing in specific instances, steeper slopes on the trail itself and the absence of handrails, as delineated later in this document. Both also have information on trail widths, surface textures, passing spaces, and resting areas.

There is also information on beach access which might be appropriate to incorporate. Although this is not a swimming beach, it is a water edge and the regulations would be applicable.

It is our understanding that per both the Coastal Development Permit Item #14B and the proposed conceptual design, a new improved public sidewalk is to be provided from Second Street to Appian Way along the northern side of East Sorrento Drive. Since there is a disconnect for an accessible way on the trail itself from the south-western-most section to the access point at the end of Venetia Drive, we concur that the public sidewalk also needs to be improved in this area as well. Since public access from one end of the trail to the other is afforded to abled-bodied people, people who use a wheelchair, or other mobility device, should be afforded access as well. Therefor sidewalk improvements in this area will provide for equivalent access while giving consideration to the CA Coastal Commission requirement to avoid fill or boardwalks. We also suggest providing accessible street parking in the public right of way near a trail access point.

Below are our comments and findings based on other regulations and proposed regulations. The question before us is several-fold, since we are of the opinion that this pathway <u>is required to be accessible</u>, then which regulations apply. From the cites below, Shoreline Trail is a grey area and that while there are differing regulations that we can use for direction, each one on its own, does not directly apply. In our professional opinion, based on our analysis of the above and following referenced regulations, guidelines, codes, and resources, we have evaluated the proposed project. It is our professional opinion that when implementing the following recommendations for Access, the 2015 Architectural Barriers Act Standards (ABAS) and the California State Parks Accessibility Guidelines (CSPAG) would be appropriate guidelines to follow.

# A. Americans with Disabilities Act Title II Regulations – 28 CFR 35 Subpart D - Program Accessibility

Since this is under a city agency there is *Program Access* requirements for a Title II entity to be considered holistically, but generally this is for existing facilities only. New construction and alterations would be required to be constructed to be accessible. For this specific project there is one place this may be applied to - the small boat launch area along the south-west end of Shoreline Trail. If this area is to remain untouched as a small boat launch, it should be made accessible unless there is another equivalent small boat launch area in the immediate vicinity, in which case informational signs are to be posted. If this area is being altered and will continue to be used as a small boat launch, then it will need to be made accessible. If this area will no longer be used as a small boat launch, signs should be posted or some other method implemented prohibiting this use.

#### B. 2010 Americans with Disabilities Act Standards (ADAS)

The 2010 ADAS defines its purpose under Chapter 1: Application and Administration and the terms are defined under Section 106.5 Defined Terms.

#### 101 Purpose

**101.1 General.** This document contains scoping and technical requirements for accessibility to sites, facilities, buildings, and elements by individuals with disabilities. The requirements are to be applied during the design, construction, additions to, and alteration of sites, facilities, buildings, and elements to the extent required by regulations issued by Federal agencies under the Americans with Disabilities Act of 1990 (ADA).

The terms previously mentioned are defined as;

#### 106.5 Defined Terms.

**Building.** Any structure used or intended for supporting or sheltering any use or occupancy.

**Element.** An architectural or mechanical component of a building, facility, space, or site. **Facility.** All or any portion of buildings, structures, site improvements, elements, and pedestrian routes or vehicular ways located on a site.

**Site.** A parcel of land bounded by a property line or a designated portion of a public right-of-way.

There are a few other terms defined worth noting;

**Public Way.** Any street, alley or other parcel of land open to the outside air leading to a public street, which has been deeded, dedicated or otherwise permanently appropriated to the public for public use and which has a clear width and height of not less than 10 feet (3050 mm).

**Technically Infeasible.** With respect to an alteration of a building or a facility, something that has little likelihood of being accomplished because existing structural conditions would require removing or altering a load-bearing member that is an essential part of the structural frame; or because other existing physical or site constraints prohibit modification or addition of elements, spaces, or features that are in full and strict compliance with the minimum requirements.

The Guidance section of the ADAS for Public Entities does define what is structurally impracticable.

#### **State and Local Government Facilities:**

#### Guidance on the Revisions to 28 CFR Section 35.151

Full compliance will be considered structurally impracticable only in those rare circumstances when the unique characteristics of terrain prevent the incorporation of accessibility features.

The purpose of the ADAS appears to be applied to sites, facilities, buildings, and elements. Shoreline Trail does not fall within one of these categories as defined in the ADA Standards. Per the defined term above, *Public Way*, it might reference the 10' wide vertical accessways from the street to Shoreline Trail itself, but nowhere in the 2010 ADAS does it state scoping or technical requirements for the *public way*.

#### C. 2011 Public-Rights-of-Way Accessibility Guidelines (PROWAG)

Although the 2011 PROWAG is not yet accepted as law it does provide some precedence for: "...design, construction, and alteration of pedestrian facilities in the public right-of-way. The

guidelines ensure that sidewalks, pedestrian street crossings, pedestrian signals, and other facilities for pedestrian circulation and use constructed or altered in the public right-of-way by state and local governments are readily accessible to and usable by pedestrians with disabilities. Under the Supplementary Information, the US Access Board states;

## Current Guidelines Developed Primarily for Buildings and Facilities on Sites

The Access Board's current accessibility guidelines were issued in 2004 and are known as the Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines... The requirements in the 1991 ADAAG and 2004 ADA and ABA Accessibility Guidelines were developed primarily for buildings and facilities on sites. <sup>12</sup> Some of the requirements can be readily applied to pedestrian facilities in the public right-of-way. However, other requirements need to be adapted for pedestrian facilities in the public right-of-way.

12. The term "site" is defined in the 1991 ADAAG (see 3.5) and 2004 ADA and ABA Accessibility Guide-lines (see 106.5 and F106.5) as a "parcel of land bounded by a property line or a designated portion of a public right-of-way."

The 2011 PROWAG defines its purpose under Chapter R1: Application and Administration with the terms defined under Section R105.5 Defined Terms.

#### R101 Purpose

**R101.1 General.** This document contains scoping and technical requirements to ensure that facilities for pedestrian circulation and use located in the public right-of-way are readily accessible to and usable by pedestrians with disabilities. Compliance with this document is mandatory when required by regulations issued by federal agencies that include accessibility standards for the design, construction, and alteration of pedestrian facilities in the public right-of-way.

The terms previously mentioned are defined as;

**Public Right-of-Way.** Public land or property, usually in interconnected corridors, that is acquired for or dedicated to transportation purposes.

Under the Overview of Proposed Guidelines in the Supplementary Information, the US Access Board states the following;

#### **Overview of Proposed Guidelines**

The proposed guidelines apply to pedestrian facilities in the public right-of-way. The proposed guidelines define the public right-of-way to mean "public land or property, usually in interconnected corridors, that is acquired for or dedicated to transportation

<u>purposes</u>" (see R105.5). The proposed guidelines ensure that the following facilities for pedestrian circulation and use located in the public right-of-way are readily accessible to and usable by pedestrians with disabilities:

- •Sidewalks, pedestrian overpasses and underpasses, and other pedestrian circulation paths, including requirements for pedestrian access routes, alternate pedestrian access routes when pedestrian circulation paths are temporarily closed, and protruding objects along or overhanging pedestrian circulation paths;
- •Pedestrian street crossings, medians, and pedestrian refuge islands, including requirements for curb ramps or blended transitions, and detectable warning surfaces;
- •Pedestrian street crossings at roundabouts, including requirements for detectable edge treatments where pedestrian crossing is not intended, and pedestrian activated signals at multi-lane pedestrian street crossings;
- •Pedestrian street crossings at multi-lane channelized turn lanes at roundabouts and at other signalized intersections, including requirements for pedestrian activated signals;
- •Pedestrian signals, including requirements for accessible pedestrian signals and pedestrian pushbuttons;

- •Transit stops and transit shelters for buses and light rail vehicles, including requirements for boarding and alighting areas at sidewalk or street level, boarding platforms, and route signs;
- •Pedestrian at-grade rail crossings, including requirements for flangeway gaps;
- •On-street parking that is marked or metered, and passenger loading zones;
- •Pedestrian signs, including requirements for visible characters on signs and alternative requirements for audible sign systems and other technologies;
- •Street furniture for pedestrian use, including drinking fountains, public toilet facilities, tables, counters, and benches; and
- •Ramps, stairways, escalators, handrails, doors, doorways, and gates.

Under the Overview of Proposed Guidelines in the Supplementary Information, the US Access Board states the following under Chapter R2: Scoping Requirements, where it defines the term pedestrian access routes;

#### **R204 Pedestrian Access Routes**

A pedestrian access route is a continuous and unobstructed path of travel provided for pedestrians with disabilities within or coinciding with a pedestrian circulation path in the public right-of-way (see R105.5). Pedestrian access routes in the public right-of-way ensure that the transportation network used by pedestrians is accessible to pedestrians with disabilities. Pedestrian access routes in the public right-of-way are analogous to accessible routes on sites in that they connect to accessible elements, spaces, and facilities in the public right-of-way, including accessible pedestrian signals and pedestrian pushbuttons, accessible street furniture, accessible transit stops and transit shelters, accessible on-street parking spaces and parking meters and parking pay stations serving those parking spaces, and accessible passenger loading zones. Pedestrian access routes in the public right-of-way also connect to accessible routes at building and facility site arrival points.

In the actual proposed technical requirements, the running slopes of pedestrian access routes (sidewalks) are allowed to follow the slope of the adjacent street per grade (R302.5);

**R302.5 Grade.** Except as provided in R302.5.1, where pedestrian access routes are contained within a street or highway right-of-way, the grade of pedestrian access routes shall not exceed the general grade established for the adjacent street or highway. Where pedestrian access routes are not contained within a street or highway right-of-way, the grade of pedestrian access routes shall be 5 percent maximum.

**Advisory R302.5 Grade.** The grade requirements in R302.5 apply to sidewalks and other pedestrian circulation paths, pedestrian street crossings and at-grade rail crossings, and pedestrian overpasses and underpasses and similar structures (see R302.2). The grade of the pedestrian access route is measured parallel to the direction of pedestrian travel. Running slope requirements are contained in R304.2.2 for perpendicular curb ramps, in R304.3.2 for parallel curb ramps, in R304.4.1 for blended transitions, and in R407.2 for ramps.

We believe the 2011 PROWAG as well as the ADAS may have been relied on, in part, to prepare the Sorrento Alamitos Bay Shoreline Trail Project Concept Design Package documents, dated October 2015, by Mia Lehrer + Associates, although there are no specific citations. On pages 9 and 10 of this document there is a reference to accessibility and a statement that the trail must conform to a "Pedestrian Access Route" and other technical criteria. Based on our walk of the site on March 9th, 2016, review of the information provided by the City, and research on regulatory items as discussed herein, in our opinion, Shoreline Trail itself does not meet the definition of

PROW per the proposed PROWAG, which suggests that the PROWAG's technical requirements for pedestrian access routes do not apply to Shoreline Trail itself and instead might apply to the 10' wide vertical accessways from the street to Shoreline Trail.

Although the PROWAG is not yet accepted as law, it is clear that the US Access Board is defining the public right of way as public lands used for transportation purposes. It appears that the term *public-right-of-way* as being used in connection with Shoreline Trail is not being used in the same manner as defined in the proposed guidelines. If Shoreline Trail is considered a PROW it can follow the same slopes of the roadway

#### D. 2015 Architectural Barrier Act Standards (ABAS)

The other federal regulation that might have impact is the ABA which applies to facilities that are designed, built, altered, or leased with federal funds. Although the CA Coastal Commission (CCC) does receive federal funds, it does not appear that this project is funded by the CCC although they might have some oversight. There are some new provisions included in the 2015 ABAS relating to outdoor developed areas that could have bearing for Shoreline Trail considering that; the ADAS technical and scoping requirements do not strictly apply to non-building, non-site, non-facility types of land; and that Shoreline Trail does not meet the definition of PROW per the proposed PROWAG. The 2015 ABAS defines its purpose under Chapter 1: Application and Administration similar to the ADAS but has provided new terms relating to outdoor developed areas under Section F106.5 Defined Terms.

#### F106.5 Defined Terms.

**Public Way.** Any street, alley or other parcel of land open to the outside air leading to a public street, which has been deeded, dedicated or otherwise permanently appropriated to the public for public use, and which has a clear width and height of not less than 10 feet (3050 mm).

**Trail.** A pedestrian route developed primarily for outdoor recreational purposes. A pedestrian route developed primarily to connect elements, spaces, or facilities within a site is not a trail.

**Trailhead.** An outdoor space that is designated by an entity responsible for administering or maintaining a trail to serve as an access point to the trail. The junction of two or more trails or the undeveloped junction of a trail and a road is not a trailhead.

**Viewing Area.** An outdoor space developed for viewing landscapes, wildlife, or other points of interest.

If we consider that Shoreline Trail, is a trail per the ABA definition there are similar yet separate requirements for Trails;

#### F247 Trails

**F247.1 General.** Where a trail is designed for use by hikers or pedestrians and directly connects to a trailhead or another trail that substantially meets the requirements in 1017, the trail shall comply with 1017.

**1017.2 Surface.** The surface of trails, passing spaces, and resting intervals shall be firm and stable

**1017.3 Clear Tread Width.** The clear tread width of trails shall be 36 inches (915 mm) minimum

**1017.4 Passing Spaces.** Trails with a clear tread width less than 60 inches (1525 mm) shall provide passing spaces complying with 1017.4 at intervals of 1000 feet (300 m) maximum. Where the full length of a trail does not fully comply with 1017, a passing space

shall be located at the end of the trail segment that fully complies with 1017. Passing spaces and resting intervals shall be permitted to overlap.

**1017.5 Tread Obstacles.** Tread obstacles on trails, passing spaces, and resting intervals shall not exceed 1/2 inch (13 mm) in height measured vertically to the highest point. **1017.7 Slopes.** The slopes of trails shall comply with 1017.7

**1017.7.1 Maximum Running Slope and Segment Length.** Not more than 30 percent of the total length of a trail shall have a running slope steeper than 1:12 (8.33%). The running slope of any segment of a trail shall not be steeper than 1:8 (12%). Where the running slope of a segment of a trail is steeper than 1:20 (5%), the maximum length of the segment shall be in accordance with Table 1017.7.1, and a resting interval complying with 1017.8 shall be provided at the top and bottom of each segment.

Running Slope of Trail	Segment	Maximum Length of Segment
Steeper than	But not Steeper than	
1:20 (5%)	1:12 (8.33%)	200 feet (61 m)
1:12 (8.33%)	1:10 (10%)	30 feet (9 m)
1:10 (10%)	1:8 (12%)	10 feet (3050 mm)

If we consider access down to the water edge a beach, the ABA has requirements for this including a wider route.

#### F248 Beach Access Routes

**F248.1 General.** Beach access routes complying with 1018 shall be provided in accordance with F248.1. Beach access routes shall be permanent or removable.

#### 1018 Beach Access Routes

1018.1 General. Beach access routes shall comply with 1018...

**1018.2 Connections**. Beach access routes shall connect an entry point to the beach to the:

- 1. High tide level at tidal beaches;
- 2. Mean high water level at river beaches; or...

**1018.3 Surface.** The surface of beach access routes and resting intervals shall be firm and stable

**1018.4 Clear Width.** The clear width of beach access routes shall be 60 inches (1525 mm) minimum...

1018.7.1 Maximum Running Slope and Segment Length. The running slope of any segment of a beach access route shall not be steeper than 1:10 (10%). Where the running slope of a segment of a beach access route is steeper than 1:20 (5%), the maximum length of the segment shall be in accordance with Table 1018.7.1, and a resting interval complying with 1018.8 shall be provided at the top and bottom of each segment...

Although the ABAS does not apply, since this is a Title II entity not federal, what is interesting about the definition of a trail under the ABAS is that there is no similar type of definition under other regulations. This definition provides for more leeway for fitting into a naturalistic terrain and may be more appropriate for this application. The same goes for beach access, although beach is not defined. Beach access requires a wider route

## E. 2015 California State Parks Accessibility Guidelines (CSPAG)

Another published guideline that does not directly apply but has impact in terms of understanding and direction, is the 2015 CA State Parks Accessibility Guidelines. This updated 2015 edition has

incorporated many of the federal ABA requirements including trails. The CSPAG states that these are guidelines and "..are intended to be used as a reference manual and department policy on accessible design...". It further states, "...California State Parks takes NO RESPONSIBILITY for reliance upon these guidelines...". The CA State Parks Accessibility Section does not have a definitions section similar to other guidelines and regulations, but they are interspersed in the text. The following are some explanations for the terms they use.

#### Section 34 Routes of Travel

#### I. Concept

**B.** The most usable route for people with mobility impairments is the Exterior Route of Travel (ERT). The technical requirements for ERT must be met in highly developed areas, such as paved parking lots, visitor centers, museums and restrooms...

**C.** The Outdoor Recreation Access Route (ORAR) is used to connect elements within a camping, picnic, or designated trailhead use area...

#### Section 42 Trails

#### I. Concept

**A.** Unlike exterior Routes of Travel (ERT) and Outdoor Recreation Access Routes (ORAR), trails provide the means for the activity of hiking. Trails provide access to remote locations and unique park features. They offer visitors the opportunity to experience various park settings.

Although the CSPAG defines trails for the purpose of hiking, unlike the ABAS they do not define hiking. The standard dictionary definition of hiking includes *walk*, *trek*, *tramp*, *tromp*, *trudge*, *slog*, *footslog*, *ramble*, *rove*, *traipse*, *hoof it*, *leg it*. The technical requirements are mostly the same as the ABAS including the slope and width requirements.

#### F. 2013 California Building Codes (CBC)

Per the 2013CBC Section 202 Definitions, there is a difference in how a sidewalk versus a walkway is defined;

**SIDEWALK.** A surfaced pedestrian way contiguous to a street used by the public. (As differentiated from the definition of "Walk".)

**Advisory Definition of SIDEWALK**. There is an important distinction between SIDEWALK and WALK and they are treated differently under the CBC. As noted in this definition, a sidewalk is contiguous to a street while a walk is not.

What is interesting to note is that CA differentiates between a sidewalk and a walk. What we have on Shoreline Trail is not a sidewalk. So the 2013 CBC does not really apply. The CBC has general scoping information regarding outdoor developed areas. Although it does not state what the technical requirements are, it does point you to the CSPAG;

#### 11B-246 Outdoor developed areas

**11B-246.1 General.** Outdoor developed areas shall comply with Section 11B-246. **Exceptions:** 

**1.** Where the enforcing agency finds that, in specific areas, the natural environment would be materially damaged by compliance with these regulations, such areas shall be subject to these regulations only to the extent that such material damage would not occur. ...

#### Advisory 11B-246.1 General

Additional information regarding accessibility best practices for outdoor occupancies can be found in the California State Parks Accessibility Guidelines

available on the California State Parks website and the Draft Final Guidelines for Outdoor Developed Areas on the U.S. Access Board website.

**11B-246.4 Day use areas and vista points.** Day use areas, vista points, and similar areas shall be accessible.

**11B-246.7 Trails and paths.** Trails, paths and nature walk areas, or portions of them, shall be constructed with gradients permitting at least partial use by wheelchair occupants. Buildings and other functional areas shall be served by paths or walks with firm and stable surfaces.

**11B-246.8** Nature trails. Nature trails and similar educational and informational areas shall be accessible to individuals with vision impairments by the provision of rope guidelines, raised Arabic numerals and symbols, or other similar guide and assistance devices.

In addition per the CBC Chapter 1, Scope and Administration Division 1, California Administration it states the following;

#### **Section 1.9 Division of the State Architect**

**General.** The purpose of this code is to ensure that barrier-free design is incorporated in all buildings, facilities, site work and other improvements to which this code applies in compliance with state law to ensure that these improvements are accessible to and usable by persons with disabilities. Additions, alterations and structural repairs in all buildings and facilities shall comply with these provisions for new buildings, except as otherwise provided and specified herein...

In addition, to incorporate standards at least as restrictive as those required by the federal government for barrier-free design under (1) Title III (Public Accommodations and Commercial Facilities), Subpart D (New Construction and Alteration) (see 28 C.F.R., Part 36), and (2) Title II (Public Entities), Section 35.151 (New Construction and Alterations) (see 28 C.F.R., Part 35) both from the Americans with Disabilities Act of 1990, 2004 Americans with Disabilities Act Accessibility Guidelines, as adopted by the US Department of Justice (see 36 C.F.R. Part 1191, Appendices B and D), and (3) under the Fair Housing Amendments Act of 1988. Some of these regulations may be more stringent than state law in order to meet the federal requirement.

- **1.9.1.1 Application.** See Government Code commencing with Section 4450. Publicly funded buildings, structures, sidewalks, curbs and related facilities shall be accessible to and usable by persons with disabilities as follows:
- **1.9.1.1.1** All buildings, structures, sidewalks, curbs and related facilities constructed in the state by the use of state, county or municipal funds, or the funds of any political subdivision of the state...

Per the CA Government Code Sections 4450 and 4451. Basically this states that the CBC applies to buildings, structures, sidewalks, curbs, and related facilities.

- **4450** (a) It is the purpose of this chapter to ensure that all buildings, structures, sidewalks, curbs, and related facilities, constructed in this state by the use of state, county, or municipal funds, or the funds of any political subdivision of the state shall be accessible to and usable by persons with disabilities...
- **4451.** (a) Except as otherwise provided in this section, this chapter shall be limited in its application to all buildings and facilities stated in Section 4450 intended for use by the public, with any reasonable availability to, or usage by, persons with disabilities, including all facilities used for education and instruction, including the University of California, the California State University, and the various community college districts, that are constructed in whole or in part by the use of state, county, or municipal funds, or the funds of any political subdivision of the state....

- (c) Except as otherwise provided by law, buildings, structures, sidewalks, curbs, and related facilities subject to the provisions of this chapter or Part 5.5 (commencing with Section 19955) of Division 13 of the Health and Safety Code shall conform to the building standards published in the California Building Standards Code relating to access for persons with disabilities and the other regulations adopted pursuant to Section 4450 that are in effect on the date of an application for a building permit. With respect to buildings, structures, sidewalks, curbs, and related facilities not requiring a building permit, building standards published in the California Building Standards Code relating to access for persons with disabilities and other regulations adopted pursuant to Section 4450, and in effect at the time construction is commenced shall be applicable.
- (d) Until building standards are published in the California Building Standards Code and other regulations are developed by the State Architect and adopted by the California Building Standards Commission pursuant to Section 4450, buildings, structures, sidewalks, curbs, and related facilities subject to the provisions of this chapter or Part 5.5 (commencing with Section 19955) of Division 13 of the Health and Safety Code shall meet or exceed the requirements of Title III of Subpart D of the federal Americans with Disabilities Act of 1990. See more at: http://codes.findlaw.com/ca/government-code/gov-sect-4451.html#sthash.3z1pKsqs.dpuf...
- (f) Administrative authorities, as designated under Section 4453, may grant exceptions from the literal requirements of the building standards published in the California Building Standards Code relating to access for persons with disabilities, or the other regulations adopted pursuant to this section, or permit the use of other methods or materials, but only when it is clearly evident that equivalent facilitation and protection that meets or exceeds the requirements under federal law are thereby secured.

#### **G. Recommendations**

With all of the above applicable or non-applicable regulations, guidelines, codes, and resources, we have evaluated the proposed design, and in our professional opinion, have provided following recommendations for Access.

#### **South-Western-Most Section**

In this area, from the street entry, we agree that a method is necessary to get down to the water area. What we recommend is to turn the ramp so the sloped walkway is parallel to Shoreline Trail above rather than at right angles to it. This allows someone using the sloped portion to avoid going directly into the water which could be hazardous. There is over 48' from the entry to the next gangway most likely providing sufficient space for this solution. We would also suggest that this sloped walkway comply with handrails and curbs for pedestrian ramps, although the slope, if necessary could be modified to conform with the ABAS and CSPAG trail slopes. Turning/passing spaces on the sloped area should be provided at various points to accommodate rise in the waterway.

The western-most area which is currently being used as a small boat launch should be made accessible if the launch area remains. If no work is being done to the area and there is another small boat launch that is accessible in the vicinity, then this would not need to be made accessible per *program accommodation* if it is indeed equivalent. We suggest that if there is no other small boat launch then this area should become an accessible boat launch. If this area

will no longer be used as a small boat launch, signs should be posted or some other method implemented prohibiting this use.

#### West of Venetia Drive

The proposed 'improved' stairs at the end of Venetia Drive has a substantial height differential. In our opinion, this makes access in this area down to the water's edge technically infeasible per the ADAS definition of site constraints and due to the location of adjacent gangways. It is our understanding that the three lots located adjacent to the walk west of Siena Drive do not require being developed per the Coastal Development Permit Item #14C since the stipulation is to avoid new fill and boardwalk. What we suggest as equivalent facilitation to the Venetia Drive stairs is to ramp the walkway down starting at the edge of the gangway in front of Lot 7. The space between the gangways at lot 7 and lot 9 is roughly 95 linear feet per the Tract Map. This would provide enough space to gradually slope down an accessible trail to the sand and water's edge. Consideration should be given to the recommended elements of turning spaces, handrail, and curb as previously delineated under the South-Western-Most section.

If it is determined that there will be no improvement west of Venetia Drive due to soil conditions thereby extending the unimproved area, we recommend providing a viewing area adjacent to the stairs at the end of Venetia Drive.

#### From Tivoli Drive to San Remo Drive

The proposed 'improved' stairs at the end of these three drives also have a substantial height differential. In our opinion, due to this and adjacent gangways, access to the water/sand in this area would be technically infeasible per the ADAS definition of site constraints. A necessary measure, in order to provide an equivalent experience, other than installing wheelchair lifts, which may have its own set of challenges, is to provide viewing areas at the head of the stairs. Even though the existing stair run in front of lot 2 is not being improved, we recommend also placing a viewing area to afford those who can not negotiate steps some measure of comparable experience.

There appears to be enough space to slightly ramp down to a viewing area to the west of the stairs bringing people closer to the water and would be suggested. At the Tivoli Drive stairs it would be preferable to have a viewing area on each side, whereas at the Campo Drive stairs one viewing area is preferable to the west due to adjacency of gangways. We also recommend that the proposed 'improved' stairs at the end of San Remo Drive have a viewing area with the stairs running parallel to the street.

#### **Novara Drive**

The proposed 'improved' stairs at the end of Novara Drive also has a substantial height differential and in our opinion would make access to the water/sand technically infeasible. Regardless, some measure of equivalent experience would need to be provided.

We recommend that the proposed 'improved' stairs at the end of San Remo Drive also has a viewing area at the top of the stairs looking east.

As previously stated, there are no specific requirements for something like Shoreline Trail other than it shall be accessible - it is a grey area as to how one makes it accessible. We recommend following the ABA Standards which is substantiated by acceptance under the CSPAG here in California. Although both do not specifically pertain to this project, it is the closest regulatory requirements that can provide guidance for equivalency. This report is our professional opinion/recommendation on how the City can make it accessible as well as other regulations that can be followed to provide specific scoping and technical direction. There is no doubt that Access is required. All of the panelist feel that providing accessible on-street parking is a *program access* requirement. One of the panelist is of the opinion that providing accessible on-street parking would also be triggered as a requirement due to the nature of the improvement. In some areas we have provided ideas for equivalent facilitation to provide for Access such as;

- Due to the terrain and height differentials, providing viewing platforms is a recommended equivalent facilitation for wheelchair lifts or pedestrian ramps to get down near the water
- Providing an accessible sidewalk at a minimum between the south-west portion and Venetia
  Drive so there is an accessible connection between both portions of the trail are equivalent
  facilitation for not having the accessible route connect along the water's edge
- Providing an accessible stall to access Shoreline Trail would provide equivalent access for those who live in the neighborhood to get to Shoreline Trail in the absence of curb cut ramps

If you should have any questions or need further clarification, please do not hesitate to contact any member of the panel.

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